

REMARKS

Claims 1, 2, 6-12, 15-23 and 25-31 are now pending, and claims 3-5, 7, 13-14, 24 and 30-31 are cancelled without prejudice. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments contained herein.

REJECTION UNDER 35 U.S.C. § 102

Ritchey (U.S. Pat. No. 3,140,584)

Claims 1, 2, 6, 7, 10-12, 15, 16, 19-23, 26, and 27 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Ritchey et al. (U.S. Pat. No. 3,140,584). This rejection is respectfully traversed.

At the outset, Applicant submits that the amendments to claims 1, 12, 21, and 26 have rendered moot all rejections thereof. These claims have been amended to include additional structural features, which the examiner indicated in a February 7, 2006 telephone call with the Applicant's Agent Kevin Pumm (Reg. 49,046) would place the claims in better condition to overcome the art of record. The amendments also clarify that the duct has an end that is received in an internal shoulder within the nozzle rim. The duct defines a conduit that ensures exhaust flow generated by the engine is *delivered directly to and received within* the nozzle rim. Accordingly, the claims clarify the novel bendable duct defines a primary conduit in which exhaust flow is incident to and delivered to the interior of the nozzle rim, rather than an end face of the nozzle rim.

The Office action incorrectly asserts that Ritchey discloses a bendable duct defining a conduit for receiving and delivering exhaust flow. Rather than a conduit, Ritchey discloses a first extension 40 and a second graphite insert 44 that form a two-piece passageway, which requires a flexible bellows 38 for sealing off exhaust flow. Ritchey also teaches away from direct incidence of combustion gas on the bellows 38 (column 3, lines 1-3). Thus, neither the two-piece arrangement nor the bellows 38 in Ritchey anticipate a single duct defining a conduit for receiving and delivering exhaust.

Furthermore, amended claims 1, 12, 21, and 26 clarify that the bendable duct is received in an internal shoulder within the nozzle rim, which ensures that exhaust flow is delivered directly to and **received within the interior** of the nozzle rim. Unlike the conduits in the cited art which "seal" against an exterior surface of a nozzle, the claimed conduit is received within the nozzle's interior. This novel duct defines a conduit for

delivering exhaust to the interior of a nozzle that is not disclosed in Ritchey. As such, the Applicant submits these claims are distinguished from Ritchey and are allowable.

REJECTION UNDER 35 U.S.C. § 102

Ziesloft (U.S. Pat. No. 3,090,198)

Claims 1, 2, 6, 7, 10-12, 15-16, 19-23, 26, and 27 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Ziesloft (U.S. Pat. No. 3,090,198). This rejection is respectfully traversed.

Applicant notes again that the amendments to claims 1, 12, 21, and 26 have rendered moot all rejections thereof. These claims have been substantially amended, and clarify the bendable duct has an end that is received in an internal shoulder within the nozzle rim. The duct defines a conduit that ensures exhaust flow generated by the engine is *delivered directly to and received within* the nozzle rim. Accordingly, the claims recite a novel bendable duct that provides a primary conduit in which exhaust flow is incident to and delivered directly within the nozzle rim, rather than to an end face of the nozzle rim.

The Office Action incorrectly asserts that Ziesloft discloses a bendable duct 88 defining a conduit for receiving and delivering exhaust flow. Rather than a conduit, Ziesloft discloses a first throat inlet liner 34 and a second throat exit liner 50 that form a two-piece passageway, which requires a flexible seal/annular bellows 88 for sealing the joint between the portions. (column 1, lines 63-65, column 3, lines 11-12). Ziesloft also teaches away from a flexible seal/annular bellows 88 functioning as the primary exhaust conduit, because Ziesloft discloses a nozzle of the converging-diverging type. (column 1 line 53). Thus, neither the two-piece liner 34,50 nor the bellows 88 in Ziesloft anticipate a single duct defining a primary conduit in which exhaust flow is received and delivered.

Furthermore, amended claims 1, 12, 21, and 26 clarify that the bendable duct is received in an internal shoulder within the nozzle rim, which ensures that exhaust flow is delivered directly to and received **within the interior** of the nozzle rim. The bendable duct defines a conduit for delivering exhaust that is not disclosed in Ziesloft. As such, the Applicant submits that these claims are distinguished from Ziesloft and are allowable for at least these reasons.

REJECTION UNDER 35 U.S.C. § 103

Crabill (U.S. Pat. No. 3,270,505) in view of Martin (U.S. Pat. No. 4,350,297)

Claims 1, 2, 6, 7, 10, 11, 12, 15, 6, 19-23, 26, and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Crabill et al (U.S. Pat. No. 3,270,505) in view of Martin (U.S. Pat. No. 4,350,297). This rejection is respectfully traversed.

The Office action states that Crabill discloses a bendable duct 54 for communicating exhaust flow generated by the engine. But Crabill discloses a seal 54 having a bellows construction that functions merely as a **seal** or closure structure to maintain an undisturbed exhaust stream, where a space between exhaust port 26 and throat 32 of nozzle 30 defines an exhaust flow path (see, for example, Crabill column 3, lines 10 through 21). Crabill does not teach or suggest a bendable duct intended to directly receive exhaust flow and deliver the exhaust flow to a nozzle. Instead, Crabill teaches a seal 54 positioned away from the exhaust port 26 and throat 32 that serves the function of sealing against loss of exhaust flow similar to the sealing members in Ritchey and Ziesloft discussed above.

Furthermore, amended claims 1, 12, 21, and 26 clarify that the bendable duct is received in an internal shoulder within the nozzle rim, which ensures that exhaust flow is delivered directly to and received **within the interior** of the nozzle rim. The novel bendable duct received within the interior of a nozzle provide for delivering exhaust flow within a nozzle not achieved, disclosed, taught, or suggested by Crabill. And, Martin fails to make up for the shortcomings of Crabill. As such, Applicant submits that claims 1, 12, 21, and 26 are distinguished from Crabill and are allowable for at least these reasons.

REJECTION UNDER 35 U.S.C. § 103

Ziesloft (U.S. Pat. No. 3,090,198) in view of Voigt (U.S. Pat. No. 4,892,253)

Claims 1, 2, 6-12, 15-23, and 25-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ziesloft (U.S. Pat. No. 3,090,198) in view of Speicher (U.S. Pat. No. 4,892,253). This rejection is respectfully traversed.

The Office Action incorrectly asserts that Ziesloft discloses a bendable duct 88 defining a conduit for receiving and delivering exhaust flow. Rather than a conduit, Ziesloft discloses a first throat inlet liner 34 and a second throat exit liner 50 that form a two-piece passageway, which requires a flexible seal/annular bellows 88 for sealing the

joint between the portions. (column 1, lines 63-65, column 3, lines 11-12). Ziesloft also teaches away from a flexible seal/annular bellows 88 functioning as the primary exhaust conduit, because Ziesloft discloses a nozzle of the converging-diverging type. (column 1 line 53). Thus, neither the two-piece liner 34,50 nor the bellows 88 in Ziesloft anticipate a single duct defining a primary conduit in which exhaust flow is received and delivered.

While Ziesloft discloses a gimbal ring 18 pivotally supporting a movable nozzle portion 14, and (column pivotally supported on a gimbal ring 18, and Speicher discloses actuation systems with yokes and arms for steering the nozzle, and Pharris (US 4,044,971) discloses a bendable duct for delivering exhaust to a nozzle inlet, it is impermissible to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such a reference fairly suggests to one of ordinary skill in the art. For at least these reasons, Applicants submit that independent claims 1, 12, 21, and 26 are not obvious in view of the cited references, and are allowable for at least theses reasons.

Furthermore, amended claims 1, 12, 21, and 26 clarify that the bendable duct is received in an internal shoulder **within** the nozzle rim, which ensures that exhaust flow is delivered directly to and received **within the interior** of the nozzle rim. Unlike the referenced conduits that “seal” against an inlet or exterior surface of a nozzle, the claimed conduit is received within the nozzle’s interior. As such, the Applicant submits that these claims are distinguished from Ziesloft and are allowable for at least these reasons.

With respect to claims 2, 6, 7, 10, 11, 15, 16, 19, 20, 22, 23, and 27, these claims ultimately depend from independent claims 1, 12, 21, or 26, which Applicant believes to be allowable in view of the above remarks. As such, Applicant submits that claims 2, 6, 7, 10, 11, 15, 16, 19, 20, 22, 23, and 27 are also allowable for at least these reasons.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (314) 726-7500.

Applicant believes he does not owe any fee in connection with this filing. If, however, Applicant does owe any such fee(s), the Commissioner is hereby authorized to charge the fee(s) to Deposit Account No. 08-0750. In addition, if there is ever any other fee deficiency or overpayment under 37 C.F.R. §1.16 or 1.17 in connection with this patent application, the Commissioner is hereby authorized to charge such deficiency or overpayment to Deposit Account No. **08-0750**.

Respectfully submitted,

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By: Kevin Pumm
Kevin Pumm, Reg. No. 49,046

HARNESS, DICKEY & PIERCE, P.L.C.
7700 Bonhomme, Suite 400
St. Louis, Missouri 63105
(314) 726-7500
(314) 726-7501 (facsimile)
KMP/dmkd